

Notice of Allowability

Application No.

10/620,285

Examiner

Binh C. Tat

Applicant(s)

PACK ET AL.

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/26/07.
2. ☒ The allowed claim(s) is/are 6-15 and 37-56.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 01/26/07
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 02/28/07
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


JACK CHIANG
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter C. Mei (Reg. No. 39,768) on 02/28/07.

The application has been amended as follow:

Claim 6 line 4, after "mask" insertion: -- without the use of tags, the contextual information comprising priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information of the mask elements--.

Claim 6 line 5, deleted "and priority".

Claim 6 line 5, after "context" insertion: --, priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information--.

Claim 6 line 7, change "context information" to --mask data--.

Claim 6 line 7, after "features" insertion: -- wherein some or all of the mask features receive mask writing resources allocated based upon the context information by adjusting time, energy, order, or resolution of the mask writing resources--.

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Claim 37 line 4, after “mask” insertion: -- without the use of tags, the contextual information comprising priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information of the mask elements--.

Claim 37 line 5, deleted “and priority”.

Claim 37 line 5, after “context” insertion: --, priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information--.

Claim 37 line 7, change “context information” to --mask data--.

Claim 37 line 7, after “features” insertion: -- wherein some or all of the mask features receive mask writing resources allocated based upon the context information by adjusting time, energy, order, or resolution of the mask writing resources--.

Claim 47 line 5, after “mask” insertion: -- without the use of tags, the contextual information comprising priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information of the mask elements--.

Claim 47 line 6, deleted “and priority”.

Claim 47 line 6, after “context” insertion: --, priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information--.

Claim 47 line 8, change “context information” to --mask data--.

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Claim 47 line 8, after "features" insertion: -- wherein some or all of the mask features receive mask writing resources allocated based upon the context information by adjusting time, energy, order, or resolution of the mask writing resources--.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

1. Claims 6-15, and 37-56 are allowed because the prior art does not teach or suggest a method for generating a lithography mask, comprising: analyzing the integrated circuit design data to generate context information for features of a mask without the use of tags, the contextual information comprising priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information of the mask elements; configuring mask design data to emphasize the context, priority, ordering, manufacturing, circuit context, resolution, criticality, distortion, topological properties, limitations, weighting factors, tolerances, or writing parameter information of the features in the mask design based on the context information; and using the mask data to write the mask features, wherein some or all of the mask features receive mask writing resources allocated based upon the context information by adjusting time, energy, order, or resolution of the mask writing resources and combination of all other features corresponding to the independent claims.
2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is 571 272-1908. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tat Binh

Patent Examiner

February 28, 2007


JACK CHIANG
SUPERVISORY PATENT EXAMINER